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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,767	01/10/2002	Mark Andrew Mattox	024016.43014	8331

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EXAMINER

CARRILLO, BIBI SHARIDAN

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 04/01/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/044,767

Applicant(s)

MATTOX, MARK ANDREW

Examiner

Sharidan Carrillo

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 06.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because the method steps are incomplete. The clean copy of claim 1 is not identical to the marked-up copy of claim 1. Claims 1, 5, 9, and 13 are indefinite because it fails to positively recite a step of complexing the iron sulfide by the addition of said composition.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4 and 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Chartier et al. (6517617B1).

Chartier et al. teach a method of cleaning industrial piping and pipelines used for carrying crude oil, oil products and natural gas (col. 1, lines 10-20, col. 2, lines 63-65, col. 3, lines 20, Example 2). Col. 13, lines 60-65 teaches using a composition to remove iron sulfide. In view of

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the indefiniteness of claim 1, the limitation are met by Chartier et al. Chartier et al. teach a composition comprising a) water, b) ammonium salt (i.e. ammonium chloride), and tetrakis (hydroxymethyl) phosphonium sulfate (col. 18, claim 1). In reference to claims 2 and 10, refer to col. 18, line 43. In reference to claims 3-4 and 11-12, refer to col. 3, lines 48-51.

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odell et al. (WO/0021892) in view of Burger (5753180).

In reference to claims 1, 5, 9, and 13, Odell et al. teach treating ferrous sulphide deposits in oil wells with aqueous tetrakis (hydroxymethyl) phosphonium salts and ammonium salts, as described in page 1. Page 2 teaches that the salt may be sulphate or chloride.

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Odell et al. fail to teach the use of the composition for treating oil and gas pipelines. However, Odell et al. do recognize the ferrous sulfide deposit as a major problem of fouling in the oil industry.

In the Background, Burger teaches it was conventional in the art to remove iron sulfide deposits from pipelines which contain water, oil and natural gas by treating the oil field pipeline systems with pigging and a biocide treatment (col. 1, lines 16, 45-50, 63-68, col. 2, lines 66-67, col. 3, lines 1-15). Burger further recognizes the need to remove iron sulfide deposits from pipelines using a biocide treatment.

It would have been within the level of the skilled artisan to have applied the composition of Odell et al. to the treatment of gas and oil pipelines, since the THPS and THPC compounds of Odell et al. are considered biocides and since Burger teaches it is conventional to use biocides for removal of iron sulfide deposits from pipelines. Additionally, one of ordinary skill in the art would have reasonably expected the composition of Odell et al. to be applied to pipelines since Odell et al. teach the same field of endeavor (i.e. oil industry) and solves the same purpose.

In reference to claims 2, 6, 10, and 14, refer to page 2, line 25 of Odell et al. In reference to claims 3-4, 7-8, 11-12, and 15-16, refer to col. 10, lines 50-55. Additionally, it would have been within the level of one of ordinary skill in the art to have adjusted the rate at which the solution is dosed depending upon the amount of ferrous sulphide deposits present.

*Response to Arguments*

8. The rejection of the claims under 112, second paragraph is maintained for the reasons recited above.

9. The rejections of the claims as being anticipated or unpatentable over Larsen or Odell et al. are withdrawn in view of the newly amended claims. In view of the new grounds of rejections, all arguments directed to Larsen et al. or Odell et al. are deemed moot. A secondary reference of Burger et al. is applied to cure the deficiencies of Odell et al.

10. It is noted that in view of the newly presented references, the examiner is withdrawing the allowability of claims 5-8.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Failon teaches a method of treating scale. Mitchell and Ferguson teach iron sulfide forming in NGL pipelines. Fidoe et al. teach the THP as biocides.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharidan Carrillo whose telephone number is 703-308-1876. The examiner can normally be reached on Monday-Friday, 6:00a.m-2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on 703-308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7719 for regular communications and 703-305-7719 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Sharidan Carrillo  
Primary Examiner  
Art Unit 1746

bsc  
March 28, 2003



**SHARIDAN CARRILLO**  
**PRIMARY EXAMINER**